WHAT IS CLAIMED IS:

1. An antibody which binds to ErbB3 protein and reduces heregulin-induced formation of an ErbB2-ErbB3 protein complex in a cell which expresses ErbB2 and ErbB3.

2. The antibody of claim 1 which further increases the binding affinity of heregulin for ErbB3 protein.

3. The antibody of claim 1 which further reduces heregulin-induced ErbB2 activation in the cell.

4. The antibody of claim 1 which is a monoclonal antibody.

5. The antibody of claim 1 which is humanized.

6. The antibody of claim 1 which is human.

7. The antibody of claim 1 which is an antibody fragment.

8. The antibody fragment of claim 8 which is a Fab.

9. The antibody of claim 1 which is labelled.

10. The antibody of claim 1 which is immobilized on a solid phase.

11. An antibody which binds to ErbB3 protein and increases the binding affinity of heregulin for ErbB3 protein.

12. An antibody which binds to ErbB3 protein and reduces heregulin-induced ErbB2 activation in a cell which expresses ErbB2 and ErbB3.

13. An antibody which binds to ErbB3 protein and reduces heregulin binding thereto.

14. The antibody of claim 13 which further reduces heregulin-induced ErbB2 activation in a cell which expresses ErbB2 and ErbB3.

15. The antibody of claim 1 which binds to the epitope bound by the 8B8 antibody.

16. The antibody of claim 1 which has the complementarity determining regions of the 8B8 antibody.

17. A composition comprising the antibody of claim 1 and a pharmaceutically acceptable carrier.

18. A cell line which produces the antibody of claim 1.

19. The cell line of claim 18 which is a hybridoma cell line producing the 8B8 antibody.

20. A method for determining the presence of ErbB3 protein comprising exposing a cell suspected of containing the ErbB3 protein to the antibody of claim 1 and determining binding of said antibody to the cell.

21. A kit comprising the antibody of claim 1 and instructions for using the antibody to detect the ErbB3 protein.